

REMARKS

Claims 1-9 are pending in this application. Claims 1 and 5 have been amended. Claim 1 has been amended to expressly recite in the body of the claim what already is recited in the claim preamble to ensure consideration by the Examiner. At page 4 of the office action, Claim 5 has been indicated to have allowable subject matter. Applicant appreciates this notification. Claim 5 has been rewritten in independent form. As to new claims 7-9, see, e.g., Applicant's specification at page 3, in the first paragraph under "Summary of the Invention."

At page 2 of the office action, Claims 1-3 and 6 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (US 6,111,044) in view of Higashiyama (JP 02307731). At page 3 of the office action, Claim 4 has been rejected under 35 U.S.C. 103(a) based on a combination of three references, Yamamoto, Higashiyama, and Kawamata et al. (US 4,952,444).

Referring to the rejection of Claim 1, the Examiner admits (page 2 of the office action) that Yamamoto fails to teach curing droplets flying from a recording head and curing said droplets while in flight or depositing said cured droplets in said image-recorded areas of said recording medium to form said coating layer. The Examiner's theory is that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of preparing a hard copy as taught by Yamamoto with the disclosure of Higashiyama in order to create a stronger and more durable printed image.

Applicant respectfully traverses the obviousness rejections.

Yamamoto is more removed from Applicant's claimed invention than the Examiner has admitted. Importantly, Yamamoto fails to teach making "hard copies." Yamamoto is directed to coating, especially to coating and protecting painted metal articles. (A person of ordinary skill in the art would especially pay attention to Yamamoto's examples, which are all directed to weathering of coated metal samples). Yamamoto fails to teach copying and making hard copies. Yamamoto only teaches that his coatings may be useful on a broad range of substrates. Yamamoto fails to teach copied images, which present additional and very complex challenges.

The person of ordinary skill in Applicant's art of making hard copies is quite occupied with thinking in terms of references that specifically teach making hard copies, such as JP 11-277724A, JP 2000-141708A, JP 2001-53943A, etc., and the Yamamoto reference has nothing that would cause the ordinarily-skilled person to try to apply it to making hard copies as the Examiner proposes.

That person of ordinary skill in the art has other problems and challenges for making hard copies that are more critical to him than the Examiner's theory of being concerned with creating a stronger and more durable printed image. Namely, he would be more concerned with quality of the hard copy being created, such as struggling with texturing problems. From the perspective of a person of ordinary skill in Applicant's art, Yamamoto is not naturally combinable with the technology of making hard copies. The Examiner's assumptions about Yamamoto are therefore rebutted as not being in accordance with how a person of ordinary skill in Applicant's art of making hard copies would think about Yamamoto. It should be appreciated that there are so many automobile coatings disclosed, that certainly a person of ordinary skill in the art of making hard copies cannot think to experiment with automobile coatings, without more reason to do so than Yamamoto presents. Claim 4 would not be obvious for the same reasons, and none of the art of record makes up for this deficiency.

In addition to the above, claims 2 and 3 are patentable over the prior art of record for the following additional reasons.

As to claim 2, the Examiner has cited column 11, lines 30-58 of Yamamoto as allegedly disclosing that a curing intensity of the curing step that is to be performed on the droplets is adjusted in accordance with the image as recorded on the recording medium, and that the droplets contain a thermosetting resin material, and the curing step comprises applying infrared radiation to the droplets while in flight. This is not correct. Yamamoto only describes adjusting the viscosity of the coating composition and thereafter applying the coating composition using an air spray or the like. The cited portion does not describe the curing step that is to be performed on the droplets while in flight; adjustment of the curing intensity; that the curing intensity is adjusted in accordance with the image as recorded on the recording medium; and that the curing step comprises applying infrared radiation to the droplets while in flight. Specifically the cited portion of Yamamoto does not disclose that the curing intensity is adjusted in accordance with the image as recorded on the recording medium, yielding a significant difference from the present invention. Moreover, as the curing intensity of the curing step that is performed on the droplets while in flight is adjusted in accordance with the image, the present invention forms the coating layer on the recording medium on which the image is recorded by depositing the droplets thereon (see claim 2). This is clearly distinct from Yamamoto which simply forms a coating layer on the substrates.

While Higashiyama describes applying light irradiation on the droplets in flight to partially

cure the droplets, Higashiyama has no teaching whatsoever that a curing intensity of the curing step is to be performed on the droplets where the intensity is adjusted in accordance with the image as recorded on the recording medium. As such, no combination of Yamamoto and Higashiyama would make claim 2 obvious.

With respect to claim 3 where changing viscosity of the droplets while in flight is recited, Higashiyama merely discloses partially curing the droplets and is silent about changing viscosity of the droplets.

Wherefore, reconsideration and withdrawal of the obviousness rejections based on the combination of references including Yamamoto are respectfully sought.

Reconsideration and withdrawal of the obviousness rejection are respectfully sought. In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-9 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephone or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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